

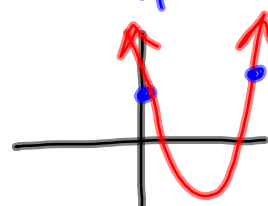
Parabola Graphing Notes

$$y = ax^2 + bx + c \rightarrow y\text{-intercept}$$

Standard form
 ↓
 + opens up
 - opens down

vertex

$$x = \frac{-b}{2a}$$



graphing form

$$y = a(x - h)^2 + k$$

vertical shift
 where the vertex is
 on the y-axis



+ open up

open down

stretches/shrinks
 slope

horizontal
 shift

where the vertex is
 on the x-axis

★ opposite

Graph $y = \frac{1}{3}(x+2)^2 - 7$

slope: $\frac{1}{3}$

Vertex: $(-2, -7)$

